



3D Printing

Quick Disconnect Couplings

CPC quick disconnect couplings can help protect propriety materials and increase uptime in 3D Printing applications.

MAKING 3D PRINTER EQUIPMENT MORE CONVENIENT TO USE

CPC has a wide variety of quick disconnect couplings that make those technologies easier, faster, and cleaner to use. From valved connectors that enable easy, drip-free material reloading and RFID technology that authenticates and protects consumable revenue streams to products that require fast service and maintenance of tubing in machines, CPC has a solution to help OEMs make equipment easier to use.



WHAT'S NEXT FOR 3D PRINTING

According to Wohlers Report 2020 the Additive Manufacturing market is expected to grow on average at 25% CAGR. Driven by design and supply chain freedom, as well as the shift from technologies focused on design and prototype to Next-Generation Technologies focused on production. With the shift comes the need for protecting proprietary materials and maintaining machine uptime in production.

CPC'S INTEGRATED RFID COUPLINGS MAKE CHANGING AND TRACKING CONSUMABLE MATERIALS FAST AND EASY

Proprietary materials are becoming more important to developing higher performing parts and enabling the production of end-use parts. CPC's Universal Dispensing Couplings with integrated RFID technology help 3D printer manufacturers protect their revenue stream by preventing the use of unauthorized materials and authenticating the use of proprietary or certified materials. The RFID technology is seamlessly integrated into the connection point, so it automatically reads as containers are loaded into machines. The RFID readers also have the ability to provide an expanded

menu of data reading options, from level sensing to eliminate the unauthorized refilling of containers to validating the material in the container is the same as in the build chamber.

CPC QUICK DISCONNECT COUPLINGS ENHANCE 3D PRINTER MAINTENANCE AND SERVICEABILITY

Tube sets connecting pumps, filters, and other products to deliver material to the build chamber often get clogged and jammed. CPC's broad portfolio of quick disconnect couplings make changing tube-sets quick and easy, helping reduce machine downtime and keeping machines printing longer. 3D printing materials with high-performance fillers—such as carbon fiber, glass, and others—are abrasive and cause tubes to fail much faster. With robust quick disconnects from CPC, equipment technicians are able perform quicker and easier maintenance of the tubing that protects the materials from humidity and moisture.

CPC TUBING CONNECTIONS HELP DELIVER FASTER, EASIER-TO-USE CONSUMABLE LOADING

CPC offers a wide range of highly engineered, specialized quick disconnects that enable easier and clean material changes and refills by reducing drips and spills and avoiding

CPC RFID-ENABLED COUPLINGS PROTECT REVENUE STREAM

- RFID-enabled to control, protect and streamline fluid handling processes
- RFID option identifies device type or connected media, verifies line connection accuracy and captures fluid and product data
- Instant connections to bulk packaging systems including bag-in-box (BIB), flexible and rigid packaging styles
- Automatic flush face valves minimize costly or dangerous spillage
- Ergonomic design and a large, shrouded thumb latch pad that's easy to grip and simple to operate
- Universal connection to a 38mm fitment neck



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exposure to harmful chemicals. Knowing that CPC quick disconnect couplings help achieve faster and easier methods of changing or adding more material, designers are able to design their 3D printer systems based on functional needs, additional performance capabilities, serviceability and useability.

TRUSTED RELIABILITY

CPC quick connectors and couplings are designed to easily handle the wide variety of additive materials used with 3D printing equipment. CPC connectors are often a critical component since they facilitate the quick and easy adding of build materials to the printer. The user-friendly ergonomic design of CPC couplings and connectors improves usability while the intuitive interface enables faster, easier maintenance of tubing on 3D machines.

DEPENDABLE DURABILITY

Built to manage the wide range of additive materials used by 3D printing equipment, CPC connectors deliver optimized flowrates with excellent flow to size ratio for superior performance. CPC couplings feature a dripless, closed-system design to ensure mess-free, drip-free disconnects necessary for efficient reloading of consumable materials, especially when handling potentially hazardous chemicals. Using CPC connectors helps increase ease of use, minimize operator error and maximizes equipment up-time—all important factors in the drive toward increasing the viability of 3D printing for production environments.

ROBUST BY DESIGN

Meeting the diverse types of 3D printing categories, CPC connectors come in an expanding variety of sizes, termination options and materials. A broad range

of configurations are available to meet specific 3D printer equipment requirements. All CPC connectors and couplings are rigorously tested including materials testing, product testing and torture testing to failure – to meet strict product specifications.

STRAIGHTFORWARD SERVICEABILITY

When your 3D printing system needs maintenance, CPC's thumb latch ensures intuitive and rapid disconnections. Designed for ease of serviceability, CPC drip-free non-spill disconnect couplings allow safer and quicker repair to get 3D printers back up and running. The simple-to-use thumb latch provides both ease and speed of installation and system maintenance.

CONNECTION ASSURANCE

CPC connectors and couplings deliver single-handed operation along with the audible CPC click to inform equipment technicians know when the build material tubing lines are connected. With a low force to connect, CPC connectors make it simple to ensure a complete connection.

ABOUT CPC

CPC is the leading provider of quick disconnect couplings for low pressure applications in medical, bioprocessing, thermal management, and specialty industrial markets.

Confidence at every point of connection.



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